TAS1O – Technology and the Skilled Trades

2025/2026 Semester 1

Overview:

Technology and the Skilled Trades, Grade 09, Open (TAS1O)
This hands-on course enables students to further explore the engineering design process and develop other technological knowledge and skills introduced in earlier grades. Students will design and safely create prototypes, products, and/or services, working with tools and technologies from various industries. As students develop their projects to address real-life problems, they will apply technological concepts such as precision measurement, as well as health and safety standards. Students will begin to explore job skills programs and education and training pathways, including skilled trades, that can lead to a variety of careers.

Prerequisites:

None

Course Website:

Log into Edsby and find TAS1O on your course list.

Instructor:

Mr. D. Cornwall, RSE (Construction and Maintenance Electrician),

Technological Education Department, Sandwich Secondary School

Communication outside of the classroom:

The quickest and most effective way to reach me outside of class time is via Edsby Messenger. I can usually respond in the same day if the message is sent during regular school hours.

If you prefer a phone call, you may call the school phone number at (519) 734-1237 and leave a message with the office staff or the answering machine. I will return your call as soon as possible.

Extra Tutoring/After-school Workshop:

I host after-school workshop access weekly. This is an opportunity to receive extra help on projects, extra time using the specialty machines, or simply a fun opportunity to make stuff with your friends. If you would like extra help specifically, please send me an Edsby message so we can arrange that opportunity. Otherwise, this can be a great opportunity to learn new processes, tools, and techniques that we don’t have time for during regular classroom hours.

CAVEAT: This is an extracurricular activity that I voluntarily organize and supervise. After-school Workshop access is subject to change without prior notice; however, I make every effort to anticipate any changes and communicate them in class and via Edsby so that students, parents, and guardians have as much opportunity as possible to make suitable alternative arrangements. After-school Workshop only runs if **three or more** students attend the session.

Mandatory PPE (Personal Protective Equipment):

As per the GECDSB Technological Education Health & Safety Rules, **all students are required** to wear clothing and apparel sufficient to cover and protect themselves from injury when attending technological education classes. This includes:

- shirts/t-shirts with sleeves
- closed-toed shoes
- shop coats, coveralls, etc.

It is strongly recommended that students keep a change of appropriate clothes and/or shoes in their locker for use during Technology class.

Appropriate PPE such as safety glasses, ear protection, and gloves will be provided. Students may request to provide and wear their own equipment at the discretion of the teacher. Safety glasses are the most common request, which is usually granted assuming the glasses meet the following requirements:

- CSA or ULC certified (look for a CSA or ULC symbol on the frame)
- Clear (non-tinted) lenses (eye protection used when welding and brazing is excepted)
- Must be in reasonably good condition (straps and arms must be secure, lenses reasonably clear and unscratched)

Purchasing PPE through the school: Students may purchase new, certified, safety glasses for personal use for $3 through the school. They may also purchase coveralls and shop coats; however, this is subject to availability, and pricing varies.

Optional Tools & Equipment (including school supplies):

There is no official textbook for this course, nor is there any cost associated to accessing needed materials outside of safety glasses as noted above. All learning materials required will be provided in class and/or on the course Edsby page. This includes assignment details, blueprints, rubrics, etc. However, the following is a list of optional supplies that may make your Technology experience easier:

- Small pocket-sized notebook for taking notes, measurements, or quick calculations during class. Pages with a square grid, either lined or dotted, is best. Unlined pages without grids are less helpful for keeping notes and drawings organized.
- Pen or pencil with eraser (for use with notebook)

- Basic pocket-sized calculator for shop math (no phones allowed in class)
- Binder to keep handouts and class assignments organized

Don't worry if you're still unsure of what to wear or bring! Proper shop attire is one of the first lessons we will cover at the beginning of the course and will become mandatory only after we complete that lesson.

Backpacks:

Due to space constraints and the associated safety hazards within the classroom/workshop area, backpacks are to be left in lockers. Students will not be allowed to enter the classroom/shop with a backpack and will need to return to their locker to store it. This may result in a student being marked late if they are turned away with a backpack and return to class after the bell signalling the start of the period. Backpacks left unattended in the halls will be collected by staff and brought to the office.

Arriving to Class Prepared:

Students are expected to arrive to class "shop ready," wearing appropriate clothing and with the mandatory PPE. Students who arrive unprepared to enter the shop safely will be assigned deskwork to complete and sent to the office where they will be redirected to a location determined by the office to complete this work. This will result in missed work periods in the shop, which may affect students' ability to complete projects on time.

Food and Drink:

No food is permitted in the machine shop. Drinks are permitted at the teacher's discretion so long as they are contained in a spill-proof container and can seal in such a way to prevent contamination from airborne wood chips, metal chips, chemicals, and other debris. Containers need to be identified and/or labelled with the owner's name.

Cell Phones:

As per GECDSB Technological Education regulations, cell phones are not permitted in construction technology classrooms or workshops and should be left in lockers. In the event of an emergency, students may be reached by calling the school number at (519) 734-1237. A staff member will page the class, and the student will be released to the office to take the call. Students who are caught with a cell phone in the shop will be immediately directed to the office to leave their phone with an office staff member. This may result in missed class time. The cell phone will not be returned until the end of the school day.

Bathroom Breaks:

Students are provided opportunities to take bathroom breaks before or after class, during lunch, or during a spare. Students who need to go during class in an emergency may do so, and exceptions will be made for medical reasons. Please refer to the **Missed Class Time** section of this document for more information.

Missed Class Time, Student Safety, and Extra Help:

- Student safety is the top priority in technology classes.
- Regular attendance is required to actively participate in classroom activities safely.
- Students are not permitted to use tools and equipment without attending proper training and meeting certification expectations.
- It is the responsibility of the student to attend all training and achieve certification to use the tools and equipment.
- Missing class may result in delays in training and certification and may impact the success of that student in the course.
- Missed lessons are rescheduled outside of regular class time to maintain quality of instruction for the rest of the class.

Making up for missed class time can be accomplished by requesting extra lessons. Extra lessons are scheduled during After-School Workshop hours or lunch hours and are subject to teacher availability. In the event of a bus cancellation announced by the GECDSB, any mandatory safety lessons and evaluations planned for that day will be rescheduled to a subsequent class when bus service is restored.

If you are anticipating missing class for any reason, please let me know! There is a greater chance that I can offer more flexibility on opportunities to prepare for, or make up for, missed class if you let me know well ahead of time.

Students looking to maximize their success in this course should strive to attend as much as possible, actively participate, and ensure that they and their peers maintain safe shop practices.

I have read and understand the GECDSB Technology course policies and procedures:

_____ _____

(Print student name) *(Student signature)*

My child has shared with me the GECDSB Technology course policies and procedures:

_____ _____

(Parent/guardian name) *(Parent/guardian signature)*

Evaluation Breakdown:

Please Note: The following Evaluation Breakdown and Class Schedule are for forecasting purposes only and are subject to change during the school year. Additional topics and evaluations may be added based on various factors such as available time, student interest, and resource availability. In the event of a change, evaluation breakdowns will be adjusted accordingly, and all changes to the course will be communicated via Edsby.

Unit 1: Shop Safety	**Percentage of Final Grade**
Safety tests & quizzes	5%
	Unit Total: 5%
Unit 2: Design Process & Brief	
Short assignments, tests, & quizzes	2%
Card Car Group Project (Group of 4)	3%
	Unit Total: 5%
Unit 3: Materials, Tools & Equipment	
Short assignments, safety tests, & quizzes	5%
Practical Cutting & Measurement Test	4%
Push Stick Project (Individual)	6%
	Unit Total: 15%
Unit 4: Life in the Trades	
Assignments, tests & quizzes	4%
Trades Research Project (Individual)	6%
	Unit Total: 10%
Unit 5: Final Summative Evaluation	
Written Documentation (Planning & Reflection)	20%
Physical Project	10%
	Unit Total: 30%
Ongoing Evaluation	
Safety Observation	**5%**
Weekly Reflections (Individual)	**30%**
	Course Total: 100%

Class Schedule (Subject to change):

Date	Unit & Topics	Main Assessment	Due on…
Week 1	Intro & Shop Safety • PPE • Safety Rules • WHMIS	• GECDSB Tech Ed. Health & Safety Test • Weekly Reflection	
Week 2	Engineering Design Process • 7 Steps • Design Brief • Specifications • Technical Drafting • Physics & Forces	• Card Car/Zinger • Weekly Reflection	
Week 3	Materials, Tools & Equipment • Measurement & Layout • Material Use & Waste • Wood • Jigs & Fixtures • Work Holding • Cutting Operations • Drilling Operations • Abrasives & Finishes	• Push Stick (Physical Project) • Practical Test • Weekly Reflection	
Week 4	Life in the Trades • The Built Environment • Building Trades • Estimates & Contracts • A day-in-the-life	• A Day-in-the-Life Research Project • Weekly Reflection	
Week 5 – 6	Final Summative Evaluation • CO_2 Car Project	• Portfolio • CO_2 Car • Weekly Reflection	